

WHAT IS CLAIMED IS:

- 1 1. A computer implemented method comprising:
2 receiving one or more performance goals;
3 retrieving a first input parameter value from a
4 plurality of input parameter values, the plurality of
5 input parameter values corresponding to one or more of
6 the performance goals;
7 providing the first input parameter value to a test
8 system;
9 receiving one or more first output variables from the
10 test system corresponding to the first input parameter
11 value; and
12 optimizing the first input parameter value based upon
13 the received output variables in order to meet one or
14 more of the performance goals.
- 1 2. The method of claim 1 wherein the test system is a
2 system automation engine and wherein the system
3 automation engine is adapted to test a system under
4 test using the first input parameter value and receive
5 the output variables from the system under test.
- 1 3. The method of claim 1 wherein the optimizing further
2 comprises:
3 adjusting the first input parameter value;
4 providing the adjusted input parameter value to the
5 test system;

6 receiving one or more second output variables from the
7 test system corresponding to the adjusted first input
8 parameter value;

9 determining whether the second output variables are
10 closer than the first output variables to one or more
11 of the performance goals; and

12 performing the adjusting again based upon the
13 determination.

1 4. The method of claim 3 wherein the adjusting is
2 selected from the group consisting of incrementing the
3 first input parameter value and decrementing the first
4 input parameter value.

1 5. The method of claim 1 further comprising:
2 retrieving a second input parameter value from the
3 plurality of input parameter values;
4 providing the second input parameter value and the
5 adjusted first input parameter value to the test
6 system;
7 receiving one or more second output variables from the
8 test system corresponding to the second input
9 parameter value and the adjusted first input
10 parameter; and
11 adjusting the second input parameter value based upon
12 the received second output variables in order to meet
13 one or more of the performance goals.

1 6. The method of claim 1 wherein the first input
2 parameter is selected from the group consisting of a

3 buffer size, a queue size, a background CPU
4 utilization, and a task priority.

1 7. The method of claim 1 wherein at least one of the
2 output variables are selected from the group
3 consisting of a maximum CPU utilization, an average
4 CPU utilization, an average translation response time,
5 and a maximum timer response time.

1 8. An information handling system comprising:
2 one or more processors;
3 a memory accessible by the processors;
4 one or more nonvolatile storage devices accessible by
5 the processors; and
6 a input parameter optimization tool for optimizing one
7 or input parameters, the input parameter optimization
8 tool comprising software code effective to:

9 receive one or more performance goals over a
10 computer network;

11 retrieve a first input parameter value from
12 a plurality of input parameter values
13 located in one of the nonvolatile storage
14 devices, the plurality of input parameter
15 values corresponding to one or more of the
16 performance goals;

17 provide the first input parameter value to a
18 test system;

19 receive one or more first output variables
20 from the test system corresponding to the
21 first input parameter value; and

22 optimize the first input parameter value
23 based upon the received output variables in
24 order to meet one or more of the performance
25 goals.

1 9. The information handling system of claim 8 wherein the
2 test system is a system automation engine and wherein
3 the system automation engine is adapted to test a
4 system under test using the first input parameter
5 value and receive the output variables from the system
6 under test.

1 10. The information handling system of claim 8 wherein the
2 software code is further effective to:
3 adjust the first input parameter value located in one
4 of the nonvolatile storage devices;
5 provide the adjusted input parameter value to the test
6 system;
7 receive one or more second output variables from the
8 test system corresponding to the adjusted first input
9 parameter value;
10 determine whether the second output variables are
11 closer than the first output variables to one or more
12 of the performance goals; and
13 perform the adjusting again based upon the
14 determination.

1 11. The information handling system of claim 10 wherein
2 the adjusting is selected from the group consisting of

3 incrementing the first input parameter value and
4 decrementing the first input parameter value.

- 1 12. The information handling system of claim 8 wherein the
2 software code is further effective to:
3 retrieve a second input parameter value from the
4 plurality of input parameter values located in one of
5 the nonvolatile storage devices;
6 provide the second input parameter value and the
7 adjusted first input parameter value to the test
8 system;
9 receive one or more second output variables from the
10 test system corresponding to the second input
11 parameter value and the adjusted first input
12 parameter; and
13 adjust the second input parameter value based upon the
14 received second output variables in order to meet one
15 or more of the performance goals.

- 1 13. The information handling system of claim 8 wherein the
2 first input parameter is selected from the group
3 consisting of a buffer size, a queue size, a
4 background CPU utilization, and a task priority.

- 1 14. A computer program product stored on a computer
2 operable media for optimizing at least one of a
3 plurality of input parameter values, said computer
4 program product comprising software code effective to:
5 receive one or more performance goals;
6 retrieve a first input parameter value from the
7 plurality of input parameter values, the plurality of

8 input parameter values corresponding to one or more of
9 the performance goals;
10 provide the first input parameter value to a test
11 system;
12 receive one or more first output variables from the
13 test system corresponding to the first input parameter
14 value; and
15 optimize the first input parameter value based upon
16 the received output variables in order to meet one or
17 more of the performance goals.

1 15. The computer program product of claim 14 wherein the
2 test system is a system automation engine and wherein
3 the system automation engine is adapted to test a
4 system under test using the first input parameter
5 value and receive the output variables from the system
6 under test.

1 16. The computer program product of claim 14 wherein the
2 wherein the software code is further effective to:
3 adjust the first input parameter value;
4 provide the adjusted input parameter value to the test
5 system;
6 receive one or more second output variables from the
7 test system corresponding to the adjusted first input
8 parameter value;
9 determine whether the second output variables are
10 closer than the first output variables to one or more
11 of the performance goals; and

12 perform the adjusting again based upon the
13 determination.

1 17. The computer program product of claim 16 wherein the
2 adjusting is selected from the group consisting of
3 incrementing the first input parameter value and
4 decrementing the first input parameter value.

1 18. The computer program product of claim 14 wherein the
2 software code is further effective to:
3 retrieve a second input parameter value from the
4 plurality of input parameter values;

5 provide the second input parameter value and the
6 adjusted first input parameter value to the test
7 system;

8 receive one or more second output variables from the
9 test system corresponding to the second input
10 parameter value and the adjusted first input
11 parameter; and

12 adjust the second input parameter value based upon the
13 received second output variables in order to meet one
14 or more of the performance goals.

1 19. The computer program product of claim 14 wherein the
2 first input parameter is selected from the group
3 consisting of a buffer size, a queue size, a
4 background CPU utilization, and a task priority.

1 20. The computer program product of claim 14 wherein at
2 least one of the output variables are selected from
3 the group consisting of a maximum CPU utilization, an

4 average CPU utilization, an average translation
5 response time, and a maximum timer response time.

- 1 21. A computer implemented method comprising:
2 receiving one or more performance goals;
3 retrieving a first input parameter value from a
4 plurality of input parameter values, the plurality of
5 input parameter values corresponding to one or more of
6 the performance goals, wherein the first input
7 parameter is selected from the group consisting of a
8 buffer size, a queue size, a background CPU
9 utilization, and a task priority;
10 providing the first input parameter value to a test
11 system, wherein the test system is a system automation
12 engine and wherein the system automation engine is
13 adapted to test a system under test using the first
14 input parameter value and receive one or more first
15 output variables from the system under test;
16 receiving one or more of the first output variables
17 from the test system corresponding to the first input
18 parameter value; and
19 optimizing the first input parameter value based upon
20 the received output variables in order to meet one or
21 more of the performance goals.

- 1 22. A computer implemented method comprising:
2 receiving one or more performance goals;
3 retrieving a first input parameter value from a
4 plurality of input parameter values, the plurality of

input parameter values corresponding to one or more of the performance goals;

providing the first input parameter value to a test system, wherein the test system is a system automation engine and wherein the system automation engine is adapted to test a system under test using the first input parameter value and receive one or more first output variables from the system under test;

receiving one or more of the first output variables from the test system corresponding to the first input parameter value;

adjusting the first input parameter value based upon the received first output variables in order to meet one or more of the performance goals;

providing the adjusted input parameter value to the test system;

receiving one or more second output variables from the test system corresponding to the adjusted first input parameter value;

determining whether the second output variables are closer than the first output variables to one or more of the performance goals; and

performing the adjusting again based upon the determination.

23. An information handling system comprising:
 - one or more processors;
 - a memory accessible by the processors;

4 one or more nonvolatile storage devices accessible by
5 the processors; and

6 a input parameter optimization tool for optimizing one
7 or input parameters, the input parameter optimization
8 tool comprising software code effective to:

9 receive one or more performance goals over a
10 computer network;

11 retrieve a first input parameter value from
12 a plurality of input parameter values
13 located in one of the nonvolatile storage
14 devices, the plurality of input parameter
15 values corresponding to one or more of the
16 performance goals, wherein the first input
17 parameter is selected from the group
18 consisting of a buffer size, a queue size, a
19 background CPU utilization, and a task
20 priority;

21 provide the first input parameter value to a
22 test system, wherein the test system is a
23 system automation engine and wherein the
24 system automation engine is adapted to test
25 a system under test using the first input
26 parameter value and receive one or more
27 first output variables from the system
28 under test;

29 receive one or more of the first output
30 variables from the test system corresponding
31 to the first input parameter value; and

32 optimize the first input parameter value
33 based upon the received output variables in
34 order to meet one or more of the performance
35 goals.

1 24. A computer program product stored on a computer
2 operable media for optimizing at least one of a
3 plurality of input parameter values, said computer
4 program product comprising software code effective to:
5 receive one or more performance goals;
6 retrieve a first input parameter value from a
7 plurality of input parameter values, the plurality of
8 input parameter values corresponding to one or more of
9 the performance goals, wherein the first input
10 parameter is selected from the group consisting of a
11 buffer size, a queue size, a background CPU
12 utilization, and a task priority;
13 provide the first input parameter value to a test
14 system, wherein the test system is a system automation
15 engine and wherein the system automation engine is
16 adapted to test a system under test using the first
17 input parameter value and receive one or more first
18 output variables from the system under test;
19 receive one or more of the first output variables from
20 the test system corresponding to the first input
21 parameter value; and
22 optimize the first input parameter value based upon
23 the received output variables in order to meet one or
24 more of the performance goals.

1 25. A computer program product stored on a computer
2 operable media for optimizing at least one of a
3 plurality of input parameter values, said computer
4 program product comprising software code effective to:
5 receive one or more performance goals;
6 retrieve a first input parameter value from a
7 plurality of input parameter values, the plurality of
8 input parameter values corresponding to one or more of
9 the performance goals;
10 provide the first input parameter value to a test
11 system, wherein the test system is a system automation
12 engine and wherein the system automation engine is
13 adapted to test a system under test using the first
14 input parameter value and receive one or more first
15 output variables from the system under test;
16 receive one or more of the first output variables from
17 the test system corresponding to the first input
18 parameter value;
19 adjust the first input parameter value based upon the
20 received first output variables in order to meet one
21 or more of the performance goals;
22 provide the adjusted input parameter value to the test
23 system;
24 receive one or more second output variables from the
25 test system corresponding to the adjusted first input
26 parameter value;

27 determine whether the second output variables are
28 closer than the first output variables to one or more
29 of the performance goals; and
30 perform the adjusting again based upon the
31 determination.